

## Blind person's walking stick

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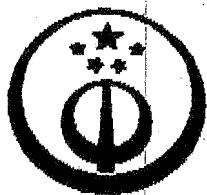
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*Translation of the claims is enclosed*

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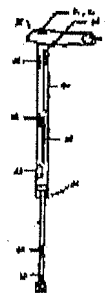
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[54]实用新型名称 盲人手杖 *Blind person's walking stick*

[57]摘要

本实用新型的目的在于提供一种符合盲人行路习惯和特点,具有多方面功能的盲人手杖。本实用新型的盲人手杖通过发射红外光并接收从前方障碍物反射回的红外光,形成检测信号控制振动报警装置发出振动形式的报警。报警装置还包括声音报警装置,在有人从盲人手杖前经过时会发生声音报警,故可兼用作防盗报警装置,并在手杖底端有积水触点,能对积水发出声音报警。电源装置采用可充电的直流电源。



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**Abstract**[Machine Translation](#)[Close](#)

## Claim

- 1, blind person's stick includes detecting device, warning driving mechanism, warning device and supply unit, when said supply unit is in the operating status, and the said warning driving mechanism of the said detecting device external situation output sense signal control of response, but said warning driving mechanism drives the warning that said warning device sent blind person's consciousness according to said detected signal production driving signal, characterized in that said warning device includes the vibration warning device of the said driving signal oscillation generation of a response, should vibrate the vibration device and include a micromachine of installing eccentric member in its pivot.
- 2, blind person's stick according to claim 1 characterized in the part of holding of said vibration warning device setting at said stick.
- 3, blind person's stick according to claim 1 characterized in that said detecting device includes: the window is received with at least one to at least one emitter window of establishing on said stick; Establish respectively at said emitter window at least one transmitter and at least one receiver with the receipt window; Offer the transmitting circuit of the said transmitter transmission signal of telecommunication; To follow the external reflected signal that reflects back by the receiver changes the receiving circuit of receiving signal of telecommunication output into; Amplify the amplifying circuit of the said signal of telecommunication of receiving; Convert the signal of telecommunication of said amplifying circuit output to the signaling conversion circuit of level; Carry out the comparator circuit that the comparison was exported with the said level of said signaling conversion circuit output and the level of setting for in advance.
- 4, blind person's stick according to claim 3 characterized in that said detecting device includes: the receiver of three setting respectively in the three receipt window of upper portion, middle part and the lower part of said stick; Three setting together is respectively to front upper place, dead ahead and the said transmitter of launching the signal of front lower place transmission in the emitter window of the middle part of said stick.
- 5, like 3 or 4 said blind person's sticks of claim, characterized in that said receiver and transmitter branch maybe infrared reception diode and infrared emitting diodes.
- 6, blind person's stick according to claim 5 characterized in said transmitting circuit still

## Claim

Include the modulation unit that will launch the signal of telecommunication and modulate into the pulse signal in clearance, said amplifying circuit is the harmonious amplifying unit on the pulse frequency of the harmonious pulse signal to said clearance of the signal of telecommunication that makes the output of said amplifying circuit still.

7, blind person's stick according to claim 6 characterized in that said transmitting circuit is still including having the a plurality of resistance that are switched over by the change-over switch that go on adjusting to the transmission signal of telecommunication size that flows past on the said infrared emitting diode and the infrared light transmitter unit of the light intensity of the control gap infrared light pulse of launching by this.

8, blind person's stick according to claim 6 characterized in that said warning device and warning driving mechanism still include audible alarm unit and corresponding audible alarm driving mechanism respectively, and said stick has still set up the change-over switch of being connected between the detected signal that is used for switching over the detecting device and vibration warning driving mechanism or the audible alarm driving mechanism.

9, the blind person stick of claim 8 characterized in that said audible alarm driving mechanism includes still that the upset level that this timing circuit was exported triggers the audible alarm unit as the said alarm level of answering by the detected signal control of said detecting device output and the timing circuit that makes its output level overturn after keeping certain time.

10, the blind person stick of claim 9 characterized in still having connect a comparator at the output of said detecting device, said detecting device still when setting up in the stick bottom and switching on in the contact the corresponding level of output give the ponding contact of said comparator.

11, like 1 or 3 or 8 or 10 said warnings of claim, characterized in that said supply unit includes rechargeable direct-current power supply, charging circuit and is used for switching over the change-over switch of said supply unit operating status or charged state.

12, like 1 or 3 or 8 or 10 said blind person's sticks of claim, characterized in that said stick posts reflection of light wainscot.